

## REMARKS

The time and courtesy of Examiner Woodall in the course of the interview on 2 December 2009 is greatly appreciated.

Claims 11-14, 16-20, 22-34, 36, and 37 have been rejected. Claim 37 was proposed to be amended in Applicant's Amendment submitted on 4 November 2009. The discussions during the interview between Attorneys Hirschkoff and Maxham and the Examiner conducted on 2 December 2009 have been considered in detail. In response, claim 11 is proposed to be amended and claim 37 is further amended. Support for the amendments is found in paragraphs [0010] and [0036] of the application, as published.

Specific features of Applicant's invention are discussed in paragraph [0036] of the specification. One function of slots 9 shown in Fig. 2 is to provide a pathway for the transport of chippings of bone material cut loose from the wall of the predrilled hole in the bone. This function was disclosed in the Branemark reference cited by Examiner (column 3, lines 63-65). One novel improvement offered by the invention claimed in the current invention is a specific design for these slots which provides a sharp cutting edge 14 at the intersection of the outermost part of the trailing slot wall, as related to the direction of rotation defined by the screw thread of the fixture when screwing in the fixture, and the outer surface of the anchoring portion of the fixture. This specific and novel cutting edge design was invented by Applicant to cut the bone material more effectively and more gently than those slots disclosed in Branemark.

However, another element of Applicant's invention discussed in paragraph [0030] is that each trailing slot wall slopes forwardly and outwardly in the direction of rotation when screwing in the fixture. This feature may also be expressed by specifying that each trailing slot wall slopes obliquely forward from within and outwardly in the direction of rotation when screwing in the fixture. This novel feature adds another function to the fixture, as described in paragraphs [0010] and [0036]. As the fixture is screwed into the bone, the forces on the fixture exerted by the defining wall of the bone during the insertion process and the cutting of bone material by cutting edges 14 press on tongues 10, which are formed between the slots radially inward. This tends to push the slot walls closer together. Thus, the novel obliqueness of the trailing slot walls provides a different supporting action on the tongues to resist distortion of the anchoring portion than that provided by the slots disclosed in Branemark. This resistance to distortion assists the anchoring portion of the fixture to retain its cylindrical shape. If the fixture is deformed into a

non-cylindrical shape, the stress on the bone into which the fixture is being inserted would increase and the strength of the anchorage will be reduced (paragraph [0007]).

To emphasize this novel aspect of the current invention, claims 11 and 37 have been amended to add the limitation that "substantially all portions of said trailing slot wall slope obliquely forwardly from within and outwardly in said direction of rotation." This limitation provides the specific structure for the trailing walls of the slots required to give the supporting action which resists the deformation of the anchoring portion of the fixture during use.

Claims 11 and 37 have been further amended to add the limitation that the portions of the anchoring portion between the adjacent slots compress radially so as to resist distortion of the cylindrical shape of the anchoring portion. This element of the invention is also disclosed in paragraphs [0010] and [0036] of the specification.

Thus there are three novel features of the claims, as amended, in the current application: the specific design for cutting edges 14, the obliqueness of trailing slot walls 12, and the radial compression of the portions of the anchoring portion between the slots to resist distortion of the anchoring portion during insertion into bone. None of these features is taught by Branemark. They were invented by Applicant as a result of Applicant's unique experience in the art of developing and building artificial joints for the human body.


## **Conclusion**

Applicant believes the amendment proposed herein, in view of the arguments above and Applicant's amendment submitted 4 November 2009, places the current application in condition for allowance. Applicant respectfully requests reconsideration and allowance of amended claims 11 and 37, and withdrawal of the rejections of dependent claims 12-14, 16-20, 22-34, and 36 and early passage to issue. Should any issues remain unresolved, Examiner Woodall is invited to telephone the undersigned attorney.

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Respectfully submitted,

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